# Broward County Asthma, Diabetes, and HIV/AIDS Disease Management HCAP Evaluation Activities



Broward Regional Health Planning Council
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#### Major Goals and Objectives

- Improve clinical outcomes
- Improve patient quality of life
- Decrease emergency room visits
- Decrease inpatient hospital visits/days
- Decrease disease related medical costs

#### Collaborating Partners

- Memorial Healthcare System
- North Broward Hospital District
- Broward Community and Family Health Center
- Broward County Health Department
- Broward County Government
- First Call for Help
- Coordinating Council of Broward
- South Florida Regional Planning Council
- Broward Regional Health Planning Council

#### **Evaluation: Lessons Learned**

- A well laid out evaluation plan must be in place BEFORE implementing the program.
- The tracking mechanism must also be in place BEFORE the project begins.
- Service providers must be well informed of the outcomes and how they will tracked.
- Service providers must be trained on the collection of outcomes.
- The outcomes tracking/collection must be analyzed monthly for errors and incompleteness beginning at program inception..

## How local evaluation has been used to inform and improve program performance and planning:

- Although disease management was occurring at both hospital districts under other funding sources before HCAP, there was no system in place to measure program success.
- In order to evaluate the effectiveness of Broward's Asthma, Diabetes, and HIV/AIDS Disease Management HCAP, a database was designed to collect clinical and cost related outcomes to determine program success.

- Database analysis shows where gaps in services and/or data exist, thus informing disease managers where improvements are needed.
- Automated reports were designed to notify disease managers when patients have not received needed services.
- Disease managers are able to review trends in clinical outcomes by tracking lab values over time determining the effectiveness of treatment.

#### How evaluation outputs and outcomes support sustainability and stakeholder interests/needs:

- The hospital districts now have data to support the effectiveness of Disease Management in improving clinical outcomes and quality of life, decreasing inappropriate use of the emergency room and inpatient hospital stays, as well the cost effectiveness of disease management.
- This data is now used to support sustaining disease management funding.
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## Monitoring and measurement of goals and objectives

- Phase I Develop an evaluation plan including timelines and outcomes
- Phase II Design, implement, and populate database
- Phase III Design database reports to determine completeness of data

- Phase V Design plan to correct incomplete data (for example, have disease managers complete all missing data fields available from charts and where data such as survey results is missing, administer survey at next visit)
- Phase VI Determine how to analyze data/ determine success (for example: determining length of enrollment necessary in order to be included in study and determining comparison groups such as comparing patients with same number of lab values available and length of time in program)

#### **Enabling Factors**

- Positive relationships between collaborating agencies
- Database creation
- Uniformly defining variables
- Data sharing between hospital districts and evaluating agency
- Desire of hospital districts to truly determine cost effectiveness and patient outcomes.

#### Barriers

- This program was instituted as a clinically based program as opposed to a research study that resulted in limited data collection capabilities.
- Alternative stand-alone databases had to be created to analyze patient clinical status not maintained on the mainframe system.
- Difficulty of designing database across two hospital systems.

#### **Barriers Continued**

- Data collection revisions needed to be made in multiple areas including collecting additional information and standardizing testing timeframes for comparison purposes.
- Formulating methods for calculating enrollment and disenrollment was challenging.
- Missing data elements consistently presented problems.

#### Diabetes Disease Management Outcomes

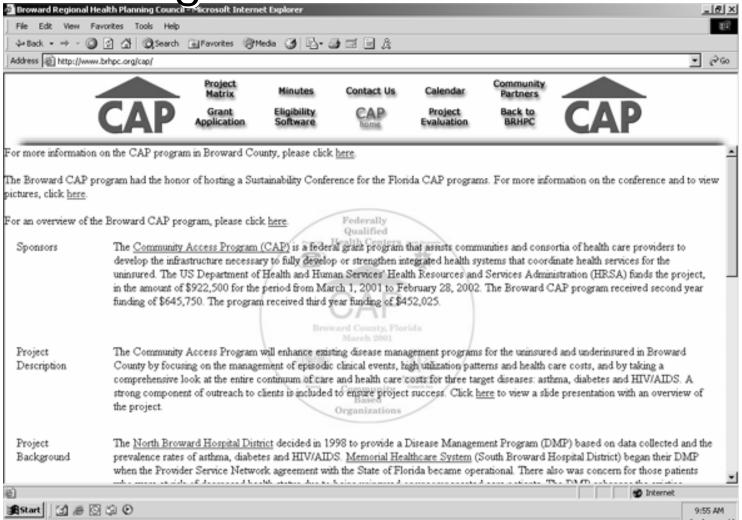
Outcomes for diabetes were the most positive across all outcome areas. Findings imply that disease management for the uninsured and underinsured populations create significant improvements in clinical lab values, health related quality of life, and patient and provider satisfaction as well as substantial financial savings.

#### CLINICAL OUTCOME: CHANGE IN Hba1C

Stratified Groups	At Baseline	At 6 Months	Change in Mean A1C
Mean	8.6	8.0	-6.6%
In Control <7	27.1%	35.6%	27.4%
Borderline 7.0-8.0	17.8%	22.7%	27.8%
Moderate 8.1-10.0	27.9%	27%	-3.2%
Severe >10.0	26.4%	14.6%	-44.4%

N=(444) # of Enrollees with at least a baseline and six month test

## Broward Regional Health Planning Council HCAP Website



http://www.brhpc.org/cap/